

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111  
Serial No. 09/827,252  
Filed: April 5, 2001

## II. Information Disclosure Statement

The Examiner has objected to the information disclosure statements filed 10/15/2001 and 1/22/2002 as failing to comply with 37 CFR § 1.98(a)(2), which requires a legible copy of each foreign patent and each publication or that portion which caused it to be listed. The Examiner indicates that all U.S. Patent Documents, WO 96/26678, and five other materials were considered, but that the remainder of the documents listed on Applicants' PTO-1449 have not been considered.

Applicants respectfully submit that full, legible copies of each reference cited on the Form PTO-1449 were filed on January 9, 2002, as reflected by the attached postcard indicating that 98 Publications were filed and received. Accordingly, Applicants respectfully request that the Examiner fully consider each reference in connection with the present application. Applicants have submitted a clean copy of the Form PTO-1449 and the Information Disclosure Statement filed on 1/9/2002 for the Examiner's convenience.

## III. 37 CFR § 1.173(b)

The Examiner has objected to the amendment filed 2/25/2002 as not complying with 37 CFR § 1.173(b), which sets forth the manner of making amendments in reissue applications. The Examiner requests that all newly-added materials be underlined and all removed material be in brackets.

Applicants have presented underlined claims 9-35<sup>1</sup> (with no other changes being made), and believe that the presently-submitted claims properly comply with the required

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<sup>1</sup> Claims 9-14 were presented in the Preliminary Amendment filed April 6, 2001 and claims 15-35 were presented in the Amendment filed February 25, 2002

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manner of making amendments in reissue applications. To the extent that the Examiner maintains this rejection, she is respectfully requested to contact the undersigned to clarify the rejection so that Applicants may make any additional necessary and appropriate corrections.

#### IV. 35 USC § 251

The Examiner has also rejected claims 15-35 under 35 USC § 251 as being broadened in a reissue application filed outside the two year statutory period. Applicants respectfully traverse this rejection and request that it be withdrawn.

The reissue application was properly filed as a broadening reissue application within the two year statutory period. The patent was granted on April 6, 1999 and this reissue application was filed April 5, 2001. The rule is that "a broadened claim can be presented within two years from the grant of original patent in a reissue application." MPEP 1412. 03.

The MPEP further states: "[i]n addition, a broadened claim can be presented *after* two years from the grant in a broadening reissue which was filed *within* two years from the grant. Where any intent to broaden is indicated in the reissue application within the two years, a broadened claim can subsequently be presented in the reissue after two years."

MPEP 1412. 03 (emphasis is original).

Applicants clearly evidenced the intent for this application to be a broadening reissue by stating that "patentees literally claimed less than they had a right to claim." Preliminary Amendment filed April 5, 2001. As such, claims 15-35 are properly presented, and Applicants respectfully request their substantive examination.

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Changes shown by markings pursuant to 37 § CFR 1.173

--9. The orthopaedic spatial fixation system of claim 1, wherein the attachment structures are holes.

10. The orthopaedic spatial fixation system of claim 1, wherein the attachment structures are pegs that are adapted to facilitate attachment of an accessories adapted to receive the pegs.

11. The orthopaedic spatial fixation system of claim 1, wherein the circle comprises a groove and the attachment structures are clamps attached to the groove.

12. The orthopaedic spatial fixation system of claim 1, further comprising markings or etches to designate the attachment structure positions.

13. The orthopaedic spatial fixation system of claim 1, further comprising one or more plates being multiple diameter plates having a second set of attachment structures.

14. The orthopaedic spatial fixation system of claim 13, wherein the second set of attachment structures is not spaced according to the diameter equation and cord length limitations.

15. An orthopaedic spatial fixation system, comprising a plurality of fixation plates wherein each plate comprises at least six points, such that a first fixation plate can be rotated less than approximately 120° about a central axis and the points of the first fixation plate will maintain a defined relationship with respect to the points of another fixation plate in the system, facilitating the application of mathematical methods during use of the fixation system.

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16. The orthopaedic spatial fixation system of claim 15, wherein the first fixation plate can be rotated approximately 60° about the central axis and maintain substantially identical angular relation with some points of another fixation plate in the system.

17. The orthopaedic spatial fixation system of claim 15, comprising a plurality of points in a number that is a multiple of six, providing 2x3 symmetry such that the first fixation plate can be flipped or rotated or both and maintain the defined relationship with respect to points of another fixation plate in the system.

18. The orthopaedic spatial fixation system of claim 15, wherein the plurality of fixation plates are circular.

19. The orthopaedic spatial fixation system of claim 15, wherein the plurality of fixation plates are not circular.

20. The orthopaedic spatial fixation system of claim 15, wherein the points on the plurality of fixation plates are positioned so that in use, points on opposite plates move into alignment as adjustment is effected.

21. The orthopaedic spatial fixation system of claim 15, wherein the points are attachment structures.

22. The orthopaedic spatial fixation system of claim 15, wherein the points are positioned along an arc of  $\alpha^\circ$  of at least a partial circle defined by a diameter  $d$ , and the chord length between adjacent attachment structures is substantially equal to  $l$ , and the defined relationship comprises

$$d = l \left( \sqrt{\frac{1}{\tan^2 \left( \frac{\alpha}{2^\circ} \right)} + 1} \right)$$

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23. The orthopaedic spatial fixation system of claim 15, wherein the orthopaedic spatial fixation system is positioned on a patient.

24. The orthopaedic spatial fixation system of claim 15, further comprising six struts, each connected at one end to one of three of the points of the first fixation plate and connected at the other end to one of three of the points of a second fixation plate, wherein each point is connected to two struts.

25. The orthopaedic spatial fixation system of claim 15, further comprising six struts, each connected at one end to one of six of the points, wherein each of the six points is substantially equidistant from one of three additional points.

26. The orthopaedic spatial fixation system of claim 25, wherein each strut is connected at one end to one of six of the points of the first fixation plate and connected at another end to one of six of the points of a second fixation plate, and wherein one end of a first strut is separated from another end of another strut by one of the three additional points.

27. The orthopaedic spatial fixation system of claim 15, wherein the at least six points are provided in number that is a multiple of three.

28. The orthopaedic spatial fixation system of claim 15, further comprising six struts, each strut having a first end and a second end, wherein the first end of each of the six struts is connected to one of three of the points of the first fixation plate such that two struts share a single point, and wherein the second end of each strut is connected to one of six of the points on the another fixation plate such that no second end of the six struts shares a single point.

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29. An orthopaedic spatial fixation system, comprising:

- (a) at least two fixation plates wherein each plate comprises a body portion having a plurality of points in multiples of three but in a number greater than three, whereby the points are placed substantially equidistant from one another along the at least two fixation plates, such that a first fixation plate can be rotated less than approximately 120° with respect to a second fixation plate, while maintaining a defined relation between the points of the at least two fixation plates; and
- (b) a plurality of adjustable length struts adapted to interconnect the plates at various positions, wherein the points facilitate attachment of the struts.

30. The orthopaedic spatial fixation system of claim 29, further comprising an accessory adapted to be attached to either or both of the at least two fixation plates.

31. The orthopaedic spatial fixation system of claim 29, wherein the orthopaedic spatial fixation system is positioned on a patient.

32. The orthopaedic spatial fixation system of claim 29, further comprising six struts, each connected at one end to one of three of the points of the first fixation plate and connected at the other end to one of three of the points of a second fixation plate, wherein each point is connected to two struts.

33. The orthopaedic spatial fixation system of claim 29, further comprising six struts, each connected at one end to one of six of the points, wherein each of the six points is substantially equidistant from one of three additional points.

34. The orthopaedic spatial fixation system of claim 33, wherein each strut is connected at one end to one of six of the points of the first fixation plate and connected at another end to one of six of the points of a second fixation plate, and wherein one end of a first strut is separated from another end of another strut by one of the three additional points.

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35. An orthopaedic spatial fixation system, comprising at least two fixation plates wherein each plate comprises a body portion having a plurality of points in multiples of three but in a number greater than three, whereby the points are placed substantially equidistant from one another along the at least two fixation plates, such that a first fixation plate can be rotated less than approximately 120° with respect to a second fixation plate, while maintaining a defined relation between the points of the at least two fixation plates.--

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### CONCLUSION

Applicants submit that pending claims 1-35 appropriately define the claimed subject matter and respectfully request issuance of a patent containing these claims. If any additional issues remain to be resolved, the Examiner is invited to contact the undersigned prior to issuance of a final Office Action. Applicants believe that no fees are due, but if mistaken, please charge any fees or credit any overpayment to Deposit Order Account No. 11-0855.

Respectfully submitted,



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